

ANYAZEV, V.I.; KAPUSHNINIKOV, Ye.A.; KORNICHKO, O.V.; KONANOV, N.I.;  
KOV, V.S.

Automatic unit for studying variations in the weight of specimens.  
Zav. lab. 30 no.9:1150 '64. (MIRA 18:3)

1. Vsentral'nyy nauchno-issledovatel'skiy institut chernoy  
metallurgii imeni Bardina.

**"APPROVED FOR RELEASE: 06/19/2000**

**CIA-RDP86-00513R000927720018-5**

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ACCESSION NR: AP5009996

error of the technique proved to be within 10%. Time for a single determination was 20-30 minutes. The authors conclude that the technique will solve a number of important problems, specifically: 1) permits a ... of additive concentration.

Card 2/2

FILE# : BOOK IDENTIFICATION  
NOV 7 1997

biochemical and histological observations of the prostatic lesions in the rat. *Journal of the National Cancer Institute*, 1976, 46: 103-110.

M.: A.N. Gavrilov, Doctor of Technical Sciences, Professor, Tech. Sci.  
 A. Ya. Tikhonov, Researcher II, for Merit in the Field of Machine and Instrument  
 Construction (Medals): N.Y. Petrovskiy, Engineer.

purpose) this collection of articles is intended for scientific and technical personnel in the instrument industry.

The 20 articles deal with the present state and the outlook for the development of instrument structures and measurement techniques in the fields of design, coordination, and manufacture of instruments are discussed in two articles. Reports are given to problems of automation and mechanization of methods used in the application of new techniques in process control, automation, and diagnosis of metals. The third section deals with new measurement methods involving the use of ultrasonics and radiological phenomena. The fourth section is devoted to the use of ultrasonics and radiological phenomena in the field of non-destructive testing. The fifth section is devoted to the use of ultrasonics and radiological phenomena in the field of non-destructive testing. The sixth section is devoted to the use of ultrasonics and radiological phenomena in the field of non-destructive testing. The seventh section is devoted to the use of ultrasonics and radiological phenomena in the field of non-destructive testing. The eighth section is devoted to the use of ultrasonics and radiological phenomena in the field of non-destructive testing. The ninth section is devoted to the use of ultrasonics and radiological phenomena in the field of non-destructive testing. The tenth section is devoted to the use of ultrasonics and radiological phenomena in the field of non-destructive testing.

# Effect of Artificial Science. Effect of Artificial Science on the Production of All Beasts and Fowls and Fishes

Yoshidomi, R.I., Candidate of Technical Sciences. Estimating the Reliability of Backlash in Small-Module Spur Gearing Used in Control Systems

Ytshar, K.A., Candidate of Technical Sciences. Conditions for  
Attaining the Stability of Macrocyclic Esters

University, L.A., Graduate of Technical Sciences. Electronics  
Technician of Mechanical Values and Their Application

## DISCUSSION

STREIBER, A. V., Jr. Application of Program Control in  
a Transfer of Knowledge

WILLIAM A. B. BOGERT, Department of Technical Sciences, Procter and Gamble, Cincinnati, Ohio, and J. A. BOBROW, Department of Technical Sciences, and J. A. BOBROW, Graduate School of Chemical Sciences, contributing to the accuracy of modeling on automobile tasks and widening their field of application.

CHAS. S. J. COLLIER, of Technical Sciences, 77, E. 43rd St., New York, N. Y., Engineer. Some ways of reducing labor consumption in the manufacture of dies for cold chisels. A Technical Science.

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Shelley, A.S., Editor. *Methods of Calibrating Precipitation Scales* 205

Library, V.I. Institute of Technical Sciences, Fundamentals of the  
Collection for Accuracy in the Measuring of Small-Angle Gears

44-38861-212

KURNYCHEV, Yevgeniy Fedorovich; SAAK'YAN, Yu.A., red.; BOROVINSKAYA,  
L.M., tekhn. red.

[Manual for young operators of grinding machines] ' s pomoshch'  
molodomu zatochniku. Rostov-na-Donu] Rostovskoe knizhnoe izd-vo,  
1961. 130 p. (MIRA 15:3)

(Grinding and polishing)

KURNYCHEV, Yevgeniy Fedorovich; TRUNIN, N.P., dots., retsenzent;  
SAAK'YAN, Yu.A., red.; BOROVINSKAYA, L.M., tekhn. red.

[Handbook for the adjusters of machine tools] V pomoshch'  
nastroishchiku metallorezhushchikh stankov. Rostov-na-Donu,  
Rostovskoe knizhnoe izd-vo, 1963. 122 p. (MIRA 16:10)  
(Machine tools)

KURNYSHOV, V.M.

[Over-all mechanization of harvesting] Kompleksnaia mekhanizatsiia  
uborki. Kazan', Tekhnigoizdat, 1955. 41 p. (MLRA 9:9)  
(Combines (Agricultural machinery))

KURNYSHOV, V.M.

[Harvesting grain in separate stages] Razdel'naya uborka zernovykh  
kul'tur. Kazan', Tatknigoizdat, 1956. 27 p. (MLA 10:10)  
(Grain--Harvesting)



KURNYSHOV, V.M.; SMIRNOVA, I.I., red.; KHUSNUTDINOV, Sh.S., tekhn.red.

[Rural efficiency promoters and inventors of the Tatar A.S.S.R.]  
Sel'skie ratsionalizatory i izobretateli Tatarskoi ASSR. Kazan',  
Tatarskoe knizhnoe izd-vo, 1960. 65 p. (MIRA 14:1)  
(Farm mechanisation)

KURO, Kanamori, prof.

Reducing the sulfur content in cast iron during the blast  
furnace process. Metallurg 6 no. 1:6-7 Ja '61. (MIRA 14:1)

1. Institut promyshlennoy tekhnologii pri Tokiyskom universitete.  
(Blast furnaces) (Desulfuration)

PAZIRUK, K.I., PEVZNER, G.M.; KUROCHITSKIY, Ch.K.

Newly designed machines and equipment for the starch industry.

Trudy TSNIIKPP no.3:188-233 '59. (MIRA 13:9)

(Starch industry--Equipment and supplies)

KUROCHITSKIY, Ch.K.

Evaluation of the effectiveness of hydrocyclone operations in  
starch manufacture. Sakh. prom. 33 no.11:64-67 N '59 (MIRA 13:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut krakhamalo-  
patochnoy promyshlennosti.  
(Starch industry--Equipment and supplies)

KUROCHITSKIY, Ch.X.

Product accounting of hydrocyclone stations in the potato starch industry. Sakh.prom. 34 no.9:64-68 S '60.

(MIRA 13:9)

1. Tsentral'nyy nauchno-issledovatel'skiy institut krakmal'no-patochnoy promyshlennosti.

(Zadobrovka--Starch industry--Equipment and supplies)  
(Separators (Machines))

KUROCHITSKIY, Ch.K.

Use of hydrocyclones for separating corn gems. Sakh.prom. 35  
no.4:63-66 Ap '61. (MIRA 14:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut krakhsal'no-  
patochnoy promyshlennosti.  
(Corn(Maize))(Separators (Machines))

KUROCHITSKIY, Ch. K.

Efficiency coefficient of clarifying and thickening units.  
Sakh.prom. 35 no.6:59-63 Je '61. (MIRA 14:6)

1. TSentral'nyy nauchno-issledovatel'skiy institut krakhmalo-  
patochnoy promyshlennosti.  
(Sugar machinery)

FURDCHITSKIY, Ch.K.

Efficiency coefficient of the process of classification. Sakh.  
prom. 35 no.11:50454 N '61. (MIRA 15:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut krakhmlo-pa-  
tochnoy promyshlennosti.

(Suspensions (Chemistry))



KUROCHITSKIY, Ch.K.

Evaluating the performance of corn germ extractors. Sakh.prom.  
35[i.e. 36] no.2:56-57 F '62. (MIRA 15:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut Krakhmalopatochnoy promyshlennosti.  
(Corn starch industry--Equipment and supplies)

KUROCHITSKIY, Ch.K.

Economic calculation of centrifugal separator stations in corn  
starch factories. Trudy TSNI IKPP no.6:77-92 '62. (MIRA 16:12)

KUROCHITSKIY, Ch.K.

Determining the operative efficiency of hydrocyclones. Trudy  
TSNIIKPP no.5:60-73 '63. (MIRA 16:7)

(Separators(Machinery)—Testing)

KUROCHITSKIY, Cheslav Kazimirovich; SHIFUNOVA, NinaI' Semenovna;  
SHAMBORANT, G.G., retsenzent; FUKS, V.K., red.

[Hydrocyclones in the starch and molasses industry] Gidro-  
tsiklony v krakhmalo patochnoi promyshlennosti. Moskva, Pi-  
shchevaia promyshlennost', 1964. 84 p. (MIRA 18:3)

KUROCHKA, A.K., inzh.; BABIN, A.S., inzh.

Electric circuits for the VI23 electric locomotive with  
recuperation. Elek. i tepl. tiaga 3 no.3:29-31 Mr '59.

(MIRA 12:5)

(Electric locomotives)

GRIGOR'YEV, Ye.T., inzhener; KOCHURAYEV, L.D., inzhener; KUROCHKA, A.L.  
inzhener; SUSLOV, B.V., inzhener; TUSHKAEV, B.A., inzhener;  
SHAPIRO, I.L., inzhener.

Design features of the VI23 electric locomotive. Zhel.dor.  
transp. 37 no.3:16-22 Mr '56. (MLRA 9:5)  
(Electric locomotives)

(Aleksandr Iosadynskiy) SOV/144-58-2-3/18

AUTHORS: Kurochka, A.L., Engineer and Bolyayev, I.P., Candidate  
of Technical Sciences, Docent

TITLE: Investigation of the Transient Regimes in the Braking  
Circuits of Electric Locomotives with Counter Excitation  
of the Exciters (Issledovaniye perekhodnykh rezhimov v  
skhemakh elektricheskogo tormozheniya elektrovozov s  
protivovozbuzhdeniyem vzbuditeley)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Elektromekhanika,  
pp 15 - 27 (USSR) 1958

ABSTRACT: Of the various types of electronic computers, analogue  
computers are the most suitable for investigating the  
problem. In this paper, basic results and experience  
are described of applying electronic computers for cal-  
culating and investigating transient phenomena in  
recuperative braking of electric locomotives with  
counter-excitation of the exciter in the case of voltage  
fluctuations in the contact network and breaks in the  
current-consuming system. A circuit of recuperative  
braking of a 4-axle electric locomotive or of one section  
of an 8-axle electric locomotive is taken as an object  
of investigation, a schematic diagram of which is given

Card1/6

SOV/144-58-8-3/18

Investigation of the Transient Regimes in the Braking Circuits of Electric Locomotives with Counter Excitation of the Exciters

in Figures 1 and 2. Analytical investigation of such circuits represents considerable difficulty, due to the fact that the braking current is a function of a number of variables. For solving the problem, the recuperative braking system is assumed as being an automatic-control system, by considering the voltage changes in the network as external disturbing effects and considering the braking current as being the controlled magnitude. It is assumed that the brushes of the motors are in the neutral position; the speed of the electric locomotive does not change during the transient period; the commutation is linear; the short-circuited section does not have any influence and that the characteristics of the motors are equal. On the basis of assumptions published earlier by one of the authors of this paper (Ref 3), the authors start off from equations for the e.m.f. of the exciter of the traction motors, the e.m.f. of the traction motors and of the recuperated current; these equations in operator form are Eqs (1) - (3), p 16. For verifying the correctness of the basic assumptions and for establishing

Card2/6



SOV/144-58-8-3/18  
Investigation of the Transient Regimes in the Braking Circuits of  
Electric Locomotives with Counter Excitation of the Exciters

structural circuits and determination of their parameters, the authors compare the curve of the change in the recuperation current measured on an electric locomotive with that determined on an electric model for braking, under conditions enumerated in Table 1, p 17, in the case of a sharp decrease in the voltage of the supplier system; the graph, Figure 6, shows a comparison of the curve determined experimentally (Curve 1) with the calculated curve (Curve 2). A number of oscillograms are included which represent the obtained experimental results. The here described method of investigation of the transient processes in electric circuits enables rapid and exhaustive calculations and analysis of the non-steady state regimes and the stability of systems containing DC machines of any complexity during motor and generator regimes at various loads and speeds. The following conclusions are arrived at. 1) In electric braking systems with counter-excitation of the exciters, oscillations of the controlled magnitude (of the braking current) take place in the case of external disturbances, the main cause

Card3/6

SOV/144-58-8-3/18

Investigation of the Transient Regimes in the Braking Circuits of Electric Locomotives with Counter Excitation of the Exciters

of which is the mutual inductance e.m.f. induced in the circuit of the independent excitation winding during sudden intensive changes of the current intensity in the counter compound winding. 2) The oscillations of the current intensity increase with increasing number of turns of the anti-compound winding, the time constant of the excitation winding of the traction motors and the exciter and the speed of the locomotive; elimination of stabilizing resistances from the circuit intensifies the oscillations but the work of the system remains stable. 3) The braking system with "cyclic stabilisation" of the external disturbing effects reacts similarly to a circuit without cyclic connection of the windings. Differences in the loads of the parallel branches of traction motors do not influence the stability of the system. 4) At locomotive speeds exceeding 50 to 55 km/h, for motors connected as shown in Figure 1 and for speeds of 90 to 95 km/h for motors connected according to the circuit, Figure 2, the stability reserve of the system decreases and measures have to be taken to reduce the

Card4/6

SOV/144-58-8-3/18

Investigation of the Transient Regimes in the Braking Circuits of Electric Locomotives with Counter Excitation of the Exciters

oscillations in the braking current. 5) Reduction of the time constant of the independent excitation winding of the exciter permits reducing considerably the oscillations in the braking current and compensation of the mutual inductance e.m.f. in this winding suppresses these oscillations completely. 6) For compensating the e.m.f. of the mutual inductance, it is recommended to introduce into the system a flexible, braking-current actuated, (negative) coupling between the armature circuit of the traction motors and the independent winding of the exciter. 7) The here described methods of analysis and investigation of electric-locomotive circuits are simple and fully applicable for calculating non-steady state regimes during the design and development of DC motor circuits as well as automatic-control circuits. There are 22 figures, 1 table and 5 Soviet references.

Card5/6

SOV/144-58-8-3/18

Investigation of the Transient Regimes in the Braking Circuits of  
Electric Locomotives with Counter Excitation of the Exciters

ASSOCIATION: Novocherkasskiy elektrovostroitel'nyy zavod  
(Novocherkassk Electric Locomotive Works)(A.L.Kuroshka)  
Kafedra elektricheskikh mashin i apparatov Novo-  
cherkasskogo politekhnicheskogo instituta  
(Chair of Electrical Machinery and Apparatus of  
the Novocherkassk Polytechnical Institute)  
(I.P. Bolyayev)

SUBMITTED: July 20, 1953

Card 6/6

DOROFEYEV, Boris Grigor'yevich, starshiy prepodavatel'; MEYEROVICH, Shmerko Samuylovich, kand.tekhn.nauk, dots.; STUKALKIN, Andrey Nikolayevich, inzh.; KUROCHKA, Aleksandr Leont'yevich, inzh.

Experimental investigation of the ventilation for the new-type starting resistors in electric locomotives. Izv.vys.ucheb.zav.; elektromekh. 1 no.11:107-111 '58. (MIRA 12:2)

1. Kafedra teoreticheskikh osnov teplotekhniki Novochoerkasskogo politekhnicheskogo instituta (for Dorofeyev). 2. Zaveduyushchiy kafedroy teoreticheskikh osnov teplotekhniki Novochoerkasskogo politekhnicheskogo instituta (for Meyerovich). 3. Novochoerkasskiy elektrozostroitel'nyy zavod (for Stukalkin, Kurochka). (Electric locomotives--Equipment and supplies)

KUROCHKA, A.L., inzh.; ALIKIN, R.I., inzh.; SUROVIKOV, A.A., inzh. (Novocherkassk)

Using phase splitters for feeding auxiliary machinery of a.c.  
electric locomotives. ~~Elek. i tepl. tiaga~~ 2 no.12:9-11 D '58.  
(MIRA 12:1)

(~~Electric locomotives~~--Electric equipment)

SOV/144-58-8-8/18

AUTHORS: Alikin, R.I. and Kurochka, A.L., Engineers

TITLE: Experimental Investigation of Traction Motors Which Are Fed by Pulsating Voltages (Eksperimental'nyye issledovaniya tyagovykh elektrodvigatelyey pri pitanii ot pul'siruyushchego napryazheniya)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Elektromekhanika, 1958, Nr 8, pp 69 - 73 (USSR)

ABSTRACT: In Soviet-built electric locomotives the single-phase line current is rectified by means of full-wave rectifiers, using as rectifiers water-cooled single-anode ignitrons with sealed envelopes. The traction motors of these locomotives are series-excited DC motors. In spite of fitting special smoothing chokes, there are considerable pulsations in the rectified voltage. For instance, in the electric locomotives of the types NO and N-60, the basic pulsation wave (100 c.p.s.) under the rated conditions reaches a value of 30% and at high speeds and low current intensities, the pulsations are more intensive still. The current pulsations resulting from the pulsations in the input voltage bring about pulsations in the magnetic excitation flux,

Card1/4

SOV/144-58-8-8/18  
Experimental Investigation of Traction Motors Which Are Fed by  
Pulsating Voltages

the flux of the armature reaction and the flux of the additional pulse involving additional losses, more intensive heating and reduced efficiency and poorer commutation. For investigating these phenomena, the laboratory of the Novocherkassk Electric Locomotive Works has carried out a series of experiments and developed special test circuits. Development of these circuits presented certain difficulties which were aggravated by the fact that the problem has not been dealt with in literature. In this paper, the basic results are given of experimental investigations. In the experiments, two machines were used, one operating as a generator, the other as a motor. In one series of experiments the motor was operated on DC with a superimposed AC component. In the second series of experiments a rectified voltage was used. The temperature rise in the windings as well as the quality of commutation were investigated in both series of experiments.

Card2/4



SOV/144-58-8-8/18

Experimental Investigation of Traction Motors Which Are Fed by Pulsating Voltages

In Figure 3 the limits are graphed of the commutation of the traction motor for various degrees of pole shunting ( $\beta = 90\%$ ,  $55\%$  and  $36\%$ ) as a function of the pulsation coefficient and the current intensity. In Figure 4 the dependence is graphed of the transformer e.m.f. on the pulsation coefficient of the supply current. On the basis of the obtained results, the author concludes that feeding of DC motors with pulsating (rectified) voltages leads to the following: - overheating of the armature winding is up to  $15\%$  higher than in the case of feeding with appropriate DC voltage; commutation becomes poorer; the deterioration in the commutation is not influenced greatly by the transformer e.m.f., which is induced in the short-circuited sections of the armature, but it is affected to a great extent by the non-coincidence in phase of the commutation flux and the flux of the armature reaction.

There are 4 figures and 1 table.

Card 3/4

SOV/144-58-8-8/18

Experimental Investigation of Traction Motors Which Are Fed by  
Pulsating Voltages

ASSOCIATION: Novocherkasskiy elektrovostroitel'nyy zavod  
(Novocherkassk Electric Locomotive Works)

SUBMITTED: June 9, 1958

Card 4/4

SOV/144-58-11-12/17

AUTHORS: Dorofeyev, B. G. (Senior Lecturer), Meyerovich, Sh. S.  
(Candidate Technical Sciences, Docent, Department Head),  
Stukalkin, A. N. (Engineer), Kurochka, A. L. (Engineer).

TITLE: Experimental Investigation of the Ventilation of Electric  
Locomotive Starting Resistances of a New Type (Eksperimental'-  
noye issledovaniye ventilyatsii elektrovoznnykh puskovykh  
soprotivleniy novogo tipa)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika,  
1958, Nr 11, pp 107-111 (USSR)

ABSTRACT: Resistances type KF are used on electric locomotives types  
N-8 and VL-23 and others. Previous work has shown that al-  
though these metal strip resistors are much better than the  
previous cast iron ones, the coils are not uniformly cooled  
and there is a temperature difference of 240°C between the  
front and back of the element and accordingly the material  
is not so fully used as it should be. Accordingly, new types  
of resistance have been developed at the Novocherkassk Elect-  
ric Locomotive works, and the Novocherkassk Polytechnical  
Institute, and the works laboratory has collaborated in testing

Card 1/4

30V/144-58-11-12/17

Experimental Investigation of the Ventilation of Electric Locomotive Starting Resistances of a New Type

the cooling of such a starting resistance type LF-1. The construction of resistance box type LF-1 is described and illustrated diagrammatically in Fig 1. The comparison between resistances type KF and type LF-1 given in Table 1 shows that the new resistances are smaller, and lighter and use much less insulation than the old though they are of higher power. The new resistances are also of simpler construction than the old. It is required that under operating conditions the local temperature rise of the resistance element surface should not exceed  $450^{\circ}\text{C}$ . In order to make the necessary tests of temperature rise a simple wind-tunnel was constructed, which is described and illustrated diagrammatically in Fig 3. In the tests measurements were made of the air flow, the temperature rise of the resistance elements, the power consumption and the air temperatures at inlet and outlet. The methods of measurement are described. The air speed ranged up to 8.75 m/sec and the current from 98 to 230 A. The test procedure is described. It was found that the heating is much more uniform than in resistances type KF.

Card 2/4

BOV/144-58-11-12/17

Experimental Investigation of the Ventilation of Electric Locomotive Starting Resistances of a New Type

According to conditions the greatest difference between the temperature rise of front and rear surfaces was 60-160°C, and accordingly the power of the resistance could be increased by 34% or the flow of cooling air could be reduced. The relationship between the permissible current and rate of air flow is given in Fig 4. An equation is given for the relationship between the permissible current and the air flow when all nine rows of resistance are in use, with a temperature rise of 450°C. Temperature rises of the different rows of resistances are given in Fig 5 and Fig 6. The temperature distribution could be somewhat improved by

Card 3/4

SOV/144-58-11-12/17

Experimental Investigation of the Ventilation of Electric Locomotive Starting Resistances of a New Type

altering the design of the fixing pins in the centre of the elements. There are 6 figures and 1 Soviet reference.

ASSOCIATIONS: Kafedra teoreticheskikh osnov teplotekhniki Novo~~cherk~~-asskogo politekhnicheskogo instituta; Novo~~cherk~~asskiy elektrovostroitel'nyy zavod (Chair of Theory of Fundamentals of Thermal Power Engineering, Novo~~cherk~~assk Polytechnical Institute, and Novo~~cherk~~assk Electrical Locomotive Works)

SUBMITTED: July 2, 1958.

Card 4/4

SCV/10-58-7-17/21

AUTHOR: Kurochka, A.L., Engineer, and Lozanovskiy, A.L., Engineer.

TITLE: The principal works' laboratory of the Novocherkassk Electric Locomotive Works.  
(Vedushchaya zavodskaya laboratoriya Novocherkasskogo elektrozostroitel'nogo zavoda)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958,<sup>29</sup> Nr 7, pp 58-61 (USSR)

ABSTRACT: The principal works laboratory (VTsZL) for electric locomotive construction and traction equipment was set up in 1955 in succession to the Electro-technical Laboratory of the Novocherkassk Electric Locomotive Works. The laboratory was expanded and the staff increased. An organisation diagram of the laboratory is given in Fig 1. The investigations of the laboratory follow an annual thematic plan. Current work is according to monthly plans. The main directions of work are: investigations on the design, construction and introduction of new electric locomotives; the investigation of new materials and development of new manufacturing processes; the

Card 1/4

SOV/10-55-7-17/21

The principal works' laboratory of the  
Novocherkassk Electric Locomotive Works.

investigation and improvement of the quality and life of the products; the study of the operation of locomotives; and finally the execution of type and adjustment tests on experimental and production locomotives. The experimental facilities of the works were extended so that these tasks could be undertaken: test beds were set up for electrical machines, traction apparatus and models of locomotive assemblies. Rigs were constructed for testing gears and transmissions, bogies, starting resistances and other items, and a dynamometer car was built. The more important test beds and rigs are then briefly described. In 1957 the laboratory made fundamental contributions to the development and production of the new a.c. locomotive type K-60. Work was also done on improved materials such as silicone insulation, epoxy resins, thermo-setting insulating varnishes and on new instruments and methods of control. One example of the work concerning the asynchronous capacitor motors used as auxiliary machines on the new single-phase/d.c. electric locomotive type K0, which were not satisfactory

Card 2/4



SOV/110-58-7-17/21

The principal works' laboratory of the  
Novocherkassk Electric Locomotive Works.

because of their low starting-torque. To improve this the laboratory proposed the introduction of phase-splitters. The system was made up and installed in five locomotives and was found to be reliable. The same solution will be adopted for the new locomotives type M60. Torque curves of motor type AS81-6 in the condenser form when operated from a three-phase supply and from a phase-splitter are shown in Fig 4. The starting torque is 80% greater when the phase-splitter is used. Work was done to improve the magnetic systems of traction motors and the manufacture of insulation for them. The induction distribution in the air-gaps of traction motors type DPE-400 and MD410 under rated conditions are shown in Fig 5. It will be seen that the magnetic system of motor MD410 is much the better of the two, the effects of armature reaction being reduced. The laboratory, working together with the All-Union Thermo-technical Institute, has developed the application of silicone insulation. Work has also been done on electric

Card 3/4

SOVA10-58-7-17/21

The principal works' laboratory of the  
Novocherkassk Electric Locomotive Works.

circuits, for instance on a six-motor regenerative circuit. Circuit stability studies were also undertaken. Other work done by the laboratory is briefly described. The laboratory has recently strengthened its association with various scientific institutions and contracts have been concluded with 16 institutes. In fact, the requirements of the works are outgrowing the laboratory, which will require further extension. There are 5 figures.

Card 4/4

SUBMITTED: May 2, 1958.

1. Industrial plants--USSR
2. Industrial plants--Operation

KUROCHKA, A.L., inzh.; ZUSMANOVSKAYA, L.L., inzh.

Using new materials in electric locomotive construction. Zhel.dor.  
transp. 40 no.10:60-62 O '58. (MIRA 11:12)  
(Electric locomotives--Construction)

KUROCHKA, A.L., inzh.

Investigating resistance of a six-motor system of recuperative  
braking with cyclical stabilization. Sbor. LII ZHT no. 159:18-42  
'58. (MIRA 12:2)

(Electric railroads--Brakes)

KUROCHKA, A.L., inzh.

Investigating resistance of a braking system used on eight-axle  
electric locomotives. Sbor.LIIZHT no.159:43-58 '58.  
(MIRA 12:2)

(Electric railroads--Brakes)

KUROCHKA, A. L., Candidate Tech Sci (diss) -- "Analysis of stabilized systems of regenerative braking using DC current". Leningrad, 1959. 18 pp (Min Transportation USSR, Leningrad Order of Lenin Inst of Railroad Transport Engineers in Acad V. N. Obraztsov), 150 copies (KL, No 22, 1959, 116)

PHASE I BOOK EXPLOITATION

SOV/3990

Kurochka, Aleksandr Leont'yevich, Aleksandr Leont'yevich Lozanovskiy, and Lyubov' L'vovna Zusmanovskaya

Ispytaniya tyagovykh mashin i apparatov elektricheskikh lokomotivov i teplovozov .  
(Testing of Traction Machinery and Apparatus of Electric and Diesel Locomotives)  
Moscow, Transzheldorizdat, 1959. 215 p. 5,000 copies printed.

Ed.: L.S. Sokolov, Engineer; Tech. Ed.: G.P. Verina.

PURPOSE: This monograph is intended for technical personnel engaged in the production, operation, and maintenance of electric traction equipment, and for students of transportation schools of higher education.

COVERAGE: The book describes methods used in testing electric machines and apparatus of electric locomotives, electric train sections, and diesel locomotives in all stages of manufacture and repair. In addition, the book discusses equipment design and electric circuit diagrams of test stations. The authors thank Candidate of Technical Sciences N.N. Sidorov and Engineer B.G. Kuznetsov. There are 30 references, all Soviet.

Card 1/5-

FIKSEL', G.K., inzh.; KUROCHKA, A.L., inzh.; BABIN, A.S., inzh.

Some practical aspects of operating VI23 series electric locomotives. Elek. i tepl. tiaga 3 no.2:33-37 F '59. (MIRA 12:4)

(Electric locomotives)



KUROCHKA, Aleksandr Leont'yevich, kand.tekhn.nauk, nauchnyy sotrudnik;  
LUR'YE, Marat Iosifovich, nauchnyy sotrudnik

Calculating transient processes of electric locomotive circuits on  
digital computers. Izv.vys.ucheb.zav.; elektromekh. } no.2:  
38-51 '60. (MIRA 13:7)

1. Novocherkasskiy nauchno-issledovatel'skiy institut  
elektrovozostroyeniya.  
(Electronic digital computers)

KUROCHKA, Aleksandr Leont'yevich, kand.tekhn.nauk; KLEYMENOV, Vladimir  
Vasil'yevich; BOLIAYEV, Ivan Pavlovich, kand.tekhn.nauk, dotsent

Use of an electric simulating model for the study of the dynamics  
of regeneration circuits of electric locomotives with consideration  
of the saturation of traction motors. Izv. vys. ucheb. zav.;  
elektromekh. 3 no.3:41-49 '60. (MIRA 13:10)

1. Zamestitel' direktora Novochoerkasskogo nauchno-issledovatel'skogo  
instituta (for Kurochka). 2. Nachal'nik laboratorii vychislitel'-  
nykh nepreryvnogo deystviya Novochoerkasskogo nauchno-issledovatel's-  
skogo instituta elektrovostroyeniya (for Kleymenov). 3. Kafedra  
elektricheskikh mashin i apparatov Novochoerkasskogo politekhnich-  
eskogo institut (for Bolyayev).

(Electric locomotives)  
(Electromechanical analogies)

KUROCHKA, A.L., kand.tekhn.nauk; SITNIK, N.Kh., kand.tekhn.nauk;  
POSKHOEKO, A.A., inzh. (Poskrobko)

Prospective a.c.locomotive. Zhel.dor.transp. 42 no.7:  
13-20 J1 '60. (MIRA 13:7)  
(Electric locomotives)

KUROCHKA, Aleksandr Leont'yovich; ZUSMANOVSKAYA, Lyubov' L'vovna; SIDOROV,  
N.I., inzh., red.; USENKO, L.A., tekhn. red.

[New insulation for traction motors] Novaia izoliatsiia tiagovykh  
dvigatelei. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va  
putei soobshcheniia, 1961. 94 p. (MIRA 14:7)  
(Electric railway motors) (Electric insulators and insulation)

KUROCHKA, A.L., kand.tekhn.nauk

Research institute of the electric locomotive industry.  
Vest. elektroprom. 32 no.5:4-7 My '61. (MIRA 15:5)  
(Electric locomotives)

KUROCHKA, A.L. (Novocherkassk)

Ways of improving main-line electric locomotives. Zhel.-dor.  
transp. 43 no.9:14-19 S '61. (MIRA 14:8)

1. Zamestitel' direktora Nauchno-issledovatel'skogo instituta po  
elektrovozostroyeniyu.  
(Electric locomotives--Design and construction)

BYSTRITSKIY, Kh.Ya.; KUROCHKA, A.L.

Immediate prospects of the Soviet manufacture of electric locomotives. Zhel.dor.transp. 44 no.5:27-32 My '62. (MIRA 15:5)

1. Zamestitel' glavnogo inzhenera Glavnogo upravleniya lokomotivnogo khozyaystva (for Bystritskiy). 2. Zamestitel' direktora Novocherkasskogo nauchno-issledovatel'skogo instituta elektrovostroyeniya (for Kurochka).  
(Electric locomotives)

YANOV, Viktor Petrovich; KUROCHKA, A.L.; ALIKIN, R.I.; KOLYCHEV,  
G.K., inzh., retsenzent; KALININ, V.K., kand. tekhn.  
nauk, red.; DROZDOVA, N.D., tekhn. red.

[Auxiliary machines of main line d.c. locomotives] Vspomo-  
gatel'nye mashiny magistral'nykh elektrovosov postoiannogo  
toka. Moskva, Transzheldorizdat, 1963. 119 p.

(MIRA 16:8)

(Electric locomotives--Electric equipment)



ALIKIN, R.I.; GORDIYENKO, F.I.; BESPROZVANNYY, I.G.; ZHIBTOV, P.F.;  
ZOLOTAREV, P.A.; ZUSMAN'YEVA, L.I.; IEPAGINOV, Y.G.; KOPORZOV,  
M.A.; KOKOREV, A.I.; KUPRIANOV, Yu.V.; KURCHEN, A.L., kand.  
tekh. nauk; LITVINOVA, L.M.; LOZANOVSKIY, A.L., kand. tekhn.  
nauk; MAVRIKOV, F.I.; MAKHAN'KOV, L.V.; POKALOV, V.I.; RAYLYAN,  
A.F.; SVERDLOV, V.Ya.; SKLYANOV, B.S.; SOLOV'YEV, K.M., kand.  
tekhn. nauk; STUKALKIN, A.N.; SHROVNIKOV, A.A.; TIKHONOV, N.G.;  
SHTEFENKO, P.K.; YANOV, V.P.

[VLEO electric locomotive.] Electrovoz VA80. Novocherkassk. Nauchno-  
issledovatel'skii institut elektrovostroyeniya. Sbornik nauchnykh  
trudov, vol. 5) (MIRA 18:5)

ACC NR: AR6028764

SOURCE CODE: UR/0269/66/000/006/0060/0060

AUTHOR: Kurochka, L. N.

TITLE: Determination of the physical parameters of a limb chromospheric flare

SOURCE: Ref. zh. Astronomiya, Abs. 6.51.463

REF SOURCE: Solnechnyye dannyye, no. 7, 1965, 45-53

TOPIC TAGS: solar flare, solar limb, Doppler shift

TRANSLATION: Assuming that the source function is constant, values of the optical thickness  $\tau_0$  at the center of the line and values of the Doppler width  $\Delta\lambda_D$  were obtained from profiles H $\alpha$ -H $\epsilon$ , H and K Ca II in the spectrum of the limb flare of 20 July 1959. Evaluations were performed using various methods; one of these methods (suggested by the author) is briefly described. The magnitudes  $\tau_0$  and  $\Delta\lambda_D$  are used to calculate the population levels, the temperature, and the turbulence speed. It is found that mean disturbance temperature is approximately 6000°. It coincides with the radiation temperature determined from optically thick lines, and exceeds the radiation temperature determined from optically thin lines. Turbulence rates may be considered equal over the entire volume of the flare; their maximum (approximately 46 km/sec) is contained in the premaximum phase of the flare, then the rates go down. 27 references. V. Banin.

SUB CODE: 03

UDC: 523.75

Card 1/1

KUROCHKA, L. N.

Velocities of particles in solar corpuscular streams. Astron.  
tsir. no.189:7-9 F '58. (MIRA 11:8)

1.Kafedra astronomii, Kiyevskiy gosudarstvennyy universitet.  
(Solar radiation)

S/035/62/000/006/017/064  
A001/A101

AUTHOR: Kurochka, L. N.  
TITLE: Results of studying the chromospheric flare of July 20, 1958  
PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 6, 1962, 56, abstract 6A416 ("Solnechnyye dannyye", 1961, no. 3, 63 - 68)  
TEXT: Spectrograms of the flare of intensity 2 in lines  $H_{\alpha}$  -  $H_{12}$  and lines  $D_3$  and  $\lambda 3888$  of He I were preliminarily processed. Continuous emission of the flare is visible on all spectrograms, which does not coincide with the seat of most intensive glow of hydrogen and metals. Two close components of the  $D_3$  line are seen in absorption during the whole flare, whereas the third component ( $\lambda 5875.99$ ) is observed in emission in seats of most intensive glow of hydrogen. No Stark broadening of lines was discovered. The intensity of hydrogen lines drops diminish after the flare maximum, whereas the intensity of hydrogen lines of the flare, of He I emission in line  $\lambda 3888.6$ . Profiles of hydrogen lines of the series' lower terms are affected by self-absorption; moreover, their central

Card 1/2

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R

Results of studying...

S/035/62/000/006/017/064  
A001/A101

parts are strongly distorted due to absorption by masses of a colder substance with different radial velocities. Some profiles of the series' higher terms are well described by the sum of two Doppler profiles without self-absorption. Populations of higher levels of hydrogen lines are determined, and the lower population limit of He I level  $3^3P$  is estimated. The population of hydrogen second level is estimated, with allowance for self-absorption, to be  $N_2 = 10^{15}$  over  $1 \text{ cm}^2$  or  $10^6 \text{ cm}^{-3}$ . There are 9 references.

[Abstracter's note: Complete translation]

E. Gurtovenko

Card 2/2

group state, second quantum state, atom number.

AT5003160

logarithmic function of the

atoms in the second state  $\approx 8 \cdot 10^{-7}$   
atoms in the first state

great optical depth of the chromosphere puts the Ly line  
into equilibrium with the chromosphere. The chromosphere  
temperature is determined by the balance of energy fluxes.  
The population is taken into account. The Boltzmann formula yields the  
chromosphere temperature formula,

REF: APO-11103

... .. determined

1000

... 7 AUG 64

24.



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THE

ART. 72655: 3175

Card 3 / 3

ACC NR: AT7002856

(N)

SOURCE CODE: UR/3239/66/000/003/0083/0087

AUTHORS: Nebesnov, V. I.; Kurochka, L. Ya.

ORG: none

TITLE: The performance of marine engines under storm conditions

SOURCE: Nikolayev. Korablestroitel'nyy institut. Sudostroyeniye i morskoye sooruzheniye no. 3, 1966, Sudovyye energeticheskiye ustanovki (Ship power equipment), 83-87

TOPIC TAGS: ship component, marine engine, engine performance characteristic, shaft, elasticity

ABSTRACT: The dynamics of ship propulsion units with elastic coupling between the main engine and the screw was investigated analytically for storm conditions. The equations of motion of the system elements were taken in the standard form. The change of the relative torque of the elastic coupling was represented by the mechanical characteristics of a single-cell electromagnetic slip clutch. This approximates the characteristics of marine hydrodynamic clutches. The effects of the rocking motion of the ship were introduced in accordance with the findings of M. A. Grechin (O sovmestnoy rabote grebnogo vinta i dvigatelya v usloviyakh volneniya i kilevoy kachki sudna. Trudy TSNIIMFa, vol. 35, 1961). Since the equations can not be solved

Card 1/2



• ACC NR: AT7002856

in a closed form, an analog computer was used to produce a solution which is presented on an oscillograph as functional relationships between the shaft speeds for the various components and the ship motion. The physical parameters introduced in the computer cover the entire range of practical values. Orig. art. has: 2 figures and 7 formulas.

SUB CODE: 13, 21/      SUBM DATE: none/      ORIG REF: 002

Card 2/2

KUROCHKA, N.V.; GOLOVIN, S.A.

Installing supports for an overhead contact network from the track.  
Transp. stroi. 13 no.7:9-10 J1 '63. (MIRA 16:9)  
(Electric railroads--- Poles and towers)

KUROCHKA, V.P.

Halloysite in phosphorite-bearing argillites of the Dniester  
ancient Paleozoic. Trudy Inst.geol.AN Uz. SSR no.9:174-180 '53.  
(MIRA 12:1)

(Dniester Valley--Halloysite) (Dniester Valley--Argillite)

Korotkiy, V.F.

3(5) **PHASE I ROCK EXPLORATION** NOV/2077  
Akademiya nauk Belorusskoy SSR, Minsk. Institut geologicheskikh nauk  
Trudy, Vyp. 1 (Transactions of the Institute of Geological Sciences of the  
Belorussian SSR Academy of Sciences) Nr 1. Minsk, 1956. 227 p. 700 copies  
printed. Errors ally inserted.  
Editorial Board: A.N. Arsenov, A.V. Puzosko, and V.M. Shcherbinin  
Ed. of Publishing House: Ye. G. Barabarov, Tech. Ed.: I. Volobasovich.  
REMARKS: This issue of the Institute's Transactions is intended for geologists  
interested in both the physical and historical geology of Belorussia.

CONTENTS: This collection of articles on the geology of Belorussia has been  
prepared by members of that republic's Geological Institute. Individual papers  
discuss the prospects of future development of Belorussia's geological and  
geophysical studies, problems in the petrography of sedimentary rocks, and  
geotectonics in paleogeography and hydrogeology. Among the papers on historical  
geology are studies on the development of the Paleozoic and Mesozoic  
analysis of lower Carboniferous horizons. References accompany each article.

Transactions of the Institute (Cont.)

NOV/2077  
Belobasovich, I.A. Classification of Gravitational and Magnetic  
Anomalies 128  
Borovitskiy, Z.M. The Lithologic-Mineralogic Characteristics of  
the Permian-Triassic Deposits in the Region of Simvichev Grad Village 129  
Borovitskiy, V.S. A Method of Mass Determination of the Carbon Residue  
Content of Sedimentary Rocks 131  
Laroy, A.P. An Experimental Study of the Aqueous Properties of Potassium  
Mineral and Organic Deposits in Areas of Excessive Humidity in the  
Western Part of the Russian Platform 133  
Shcherbinin, Z.M. Autogenic Formations on Quartz and Feldspar Grains in  
Division and Lower-Triassic Terrigenous Deposits of the Pripyatskiy  
Basin 135  
Korotkiy, V.F. "Gallazhi" in the Phosphorite-containing Argillites of  
the Early Paleozoic of the Pridnestrov'ye 136  
Card 4/5 174

KUROCHKA, V.P.

Halloysite in phosphorite-bearing argillites of the Dniester  
ancient Paleozoic. Trudy Inst.geol.nauk. AN BSSR no.1:174-180  
' 58. (MIRA 12:1)

(Dniester Valley--Halloysite)  
(Dniester Valley--Argillite)

KUROCHKA, V.P.

Bentonites in Kel'mentsy District, Chernovtsy Province. Bent. gliny  
Ukr. no.2:50-64 '58. (MIRA 12:12)

1.Chernovitskiy gosudarstvennyy universitet.  
(Kel'mentsy District--Bentonite)

20-119-2-43/60

AUTHOR: Kurochka, V. P.

TITLE: Halloysite in Phosphorite-Containing Argillites of the  
Ancient Palaeozoic Era of the Pridnestrov'ye Region  
(Galluazit v fosforitonasnykh argillitakh drevnego paleozoya  
Pridnestrov'ya)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 2,  
pp. 351 - 353 (USSR)

ABSTRACT: Halloysite is extensively distributed in loamy rocks of  
different age, however, it was not ascertained up to now  
among Cambrian sediments. The author has ascertained a thin  
interstratification (of from 4-5cm) of argillite of halloy-  
site-like composition in the mentioned argillites of the  
min'kovetskiy horizon of the Ushitskaya suite. The phospho-  
rite-containing horizon, which is now (with question mark)  
classified into the Cambrian era is built up by argillites,  
the main rockforming mineral of which is represented by  
illite (Reference 6). The min'kovetskiy horizon is charac-  
terized by its concretions of primary phosphorites with  
coarse crystalline sulphide formations of nonferrous metals.

Card 1/4

20-119-2-45/60

Halloysite in Phosphorite-Containing Argillites of the Ancient Palaeozoic Era of the Pridnestrov'ye Region

Thus occurrence of halloysite can help to explain the conditions of the exterior environment as one of the main factors of the sedimentary ore formation. Because of the lack of organic remains in the horizon its sediments cannot be biostratigraphically reconciled with the analogous deposits of east-and west-volyn'. Therefore halloysite in certain circumstances can also be used for correlation purposes. Then the mentioned argillite is described in detail. The orientated aggregates of its loam substance have a micro-scaly structure and a refraction index of 1,555 to 1,559. The heating curve (figure 1a) is distinguished by the endothermic effects at 130° and 580°C typical for halloysite and by an exothermic effect at 960°C. The first endoeffect corresponds to the transition to metahalloysite, the second to a complete dehydration of halloysite (Reference 7). The effect at 960°C corresponds to the destruction of the lattice of the crystal and to the formation of a new compound. The dehydration curve

Card 2/4



20-119-2-15/60

Halloysite in Phosphorite-Containing Argillites of the Ancient Palaeozoic Era of the Pridnestrov'ye Region

(figure 1b) has 4 clearly defined sections: correspondingly at 20-100°C -3.57%, at 100-300°C -1.03%, at 300-550°C -10.72%, and between 550-900°C -0.90% of water is eliminated. By the X-ray diagram obtained with an iron radiation the most characteristic halloysite lines are fixed (Reference 3), which entirely correspond to the data on dehydration and those of the thermal analysis (table 1). Furthermore, results of the spectrum absorption of the suspension (dyed blue by benzidin, type IV, figure 2) are given. Electron-microscopic investigations confirm the presence of montmorillonite, which was demonstrated by dyeing by further dyes. Table 2 gives results of the chemical analysis. The mentioned montmorillonite also causes the deviation of the relation  $Al_2O_3:SiO_2$ , which here is equal to 1:1.94, from the theoretical relation (1:2) (Reference 3). Thus the main rock-forming mineral of the argillite under consideration is halloysite. Those of secondary importance are kaolinite and montmorillonite. Halloysite ought to

Card 3/4

20-119-2-45/60

Halloysite in Phosphorite-Containing Argillites of the Ancient Palaeozoic Era of the Pridnestrov'ye Region

be a result of the diagenetic change of illite. The association of the mentioned 4 minerals gives evidence of a wide modification range of the pH-value during the period of formation of the mentioned argillites and confirms the theorem on the illite-montmorillonite-stage of the decomposition of mica (Reference 4). There are 2 figures, 2 tables, and 7 references, 7 of which are Soviet.

ASSOCIATION: Institut geologicheskikh nauk Akademii nauk BSSR (Institute for Geological Sciences of the Academy of Sciences of the Belorussian SSR)

PRESENTED: September 2, 1957, by D. I. Shcherbakov, Member, Academy of Sciences, USSR

SUBMITTED: September 2, 1957

Card 4/4

KUROCHKA, V.P., Cond Geol-Min Sci -- (diss) "Cycles of sediment-  
~~ation~~ accumulation of ancient Paleozoic deposits of Pridnestrov'ye  
and <sup>to facies</sup> ~~environmental~~ adaptation of clay minerals, <sup>the</sup> ~~elements~~, and cer-  
tain mineral resources <sup>(to the)</sup> ~~to these cycles~~" L'viv, 1959. 39 pp (in of  
Higher Education USSR. L'viv State Univ n Franko). 150 copies  
List of author's work, pp 38-39 (10 titles) (KI, 37-59, 106)

16

KUROCHKA, V.P. [Kurachka, V.P.]; TKACHEV, L.I. [Tkachou, L.I.]

Problem of interpreting results from electron microscope studies of  
clay minerals. Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.3:85-91 '59.  
(MIRA 13:3)

(Electron microscopy)  
(Clay)

KUROCHKA, V.P.

Cycles and facies of the lower Paleozoic along the Dniester.  
Dokl.AN BSSR 3 no.3:116-122. Mr '59. (MIRA 12:8)

1. Predstavleno akademikom AN BSSR K.I.Lukashevyn.  
(Dniester Valley--Geology, Stratigraphic)

MAKHNAKH, A.S.; KUROCHKA, V.P. [Kurachka, V.P.]

Stratigraphy and lithology of late Pre-Cambrian and  
Cambrian sediments at the village of Kuranets in Vileyka  
District, Molodechno Province. Vestsi AN BSSR.Ser.fiz.-  
tekh.nav. no.4:89-103 '59. (MIRA 13:4)  
(Vileyka District--Geology, Stratigraphic)

3(5)

SOV/20-127-5-42/50

AUTHOR: Kurochka, V. P.

TITLE: On the Boundary Between the Lower Cambrian and the Ordovician of the Pridnestrov'ye

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 5, pp 1085 - 1088 (USSR)

ABSTRACT: It is urgently necessary to find an agreement between the numerous data collected in recent times on the cross sections of the Lower Paleozoic of the Russian platform. This problem meets with difficulties because the position of individual stratigraphy units especially in such a classical natural cross section as the Pridnestrov'ye has not yet been determined. The interpretation of the position of the mentioned formations depends in numerous cases on the solution of the problem of the character of the boundary between the Komorovskiy and Molodetskiy horizon. At present, the boundary mentioned in the title is usually drawn at the base of the latter horizon (Refs 1,3,8,11, 12). It may be seen from detailed investigations that the Molodetskiy horizon may be regarded in this case as a shortened stratum of typically marine formations. The latter are not connected

Card 1/4

On the Boundary Between the Lower Cambrian and the  
Ordovician of the Pridnestrov'ye

SOV/20-127-5-42/58

with the separation from the sea and the main land i.e. with a transgression but with a recession (Ref 6). At first sight there is the impression that this is a basal stratum of transgressive origin of the sandstones of the Molodovskiy horizon. Actually, however, they were only strong marine currents which at a constant depth of the waters had considerably eroded the sediments deposited earlier. Due to this fact an incorrect idea of a transgressive sequence was obtained. The author gives 6 proofs of lithological and faunistical character for the correctness of this concept, among them the papers by O. I. Nikiforova (Ref 7) D. V. Nalivkin (Ref 6), and Th. Văscăuțanu (Ref 13). The mentioned strong marine currents were formed as a consequence of the relief changes of the bottom of the sea. The currents differed spatially and chronologically so that also the eroding force differed. This fact also explains a strong variability of the thickness and the lithological composition of the Molodovskiy horizon. In connection with the above explanation of the facial character of the mentioned horizon a revision of the hitherto concepts of the stratigraphic position of the oldest Paleozoic of the mentioned area becomes necessary. The spore complex

Card 2/4



On the Boundary Between the Lower Cambrian and the  
Ordovician of the Pridnestrov'ye

SC7/20-127-5-42/56

investigated in 6 samples by B. V. Timofeyev (Ref 11) characterizes only the Bronitskiy horizon (according to the stratigraphic scheme by M. F. Stashchuk, Ref 9). This complex is to be regarded as corresponding to that of the laminarite strata of the Pribaltika (Baltic countries) and to the laminarite strata investigated by A. S. Makhnach (Ref 5) in northern Belorussia. Since the age of the Molodovski horizon which closes the cross section of the oldest Paleozoic in the mentioned area was reliably determined as Ordovician on the basis of the fauna, the underlying formations without transgression are to be regarded also as Ordovician. The lower boundary of the Ordovician is thus in the roof of the phosphorite-bearing argillites of the Molodovski horizon. The following horizons must also be classified as belonging to the Ordovician: Sokoletskiy, Komorovski, and Molodovski (Scheme by G. Kh. Dikenshteyn, Ref 1). There are 13 references, 12 of which are Soviet.

Card 3/4

On the Boundary Between the Lower Cambrian and the  
Ordovician of the Pridnestrov'ye

SOV/20-127-5-42/58

ASSOCIATION: Institut geologicheskikh nauk Akademii nauk SSSR (Institute  
of Geological Sciences of the Academy of Sciences, USSR)

PRESENTED: April 17, 1959, by N. S. Shatskiy, Academician

SUBMITTED: April 15, 1959

Card 4/4

MAKHNACH, A. S., KUROCHKA, V. P., PAP, A. M., MOLYAVKO, L. M.

Weathering crust of the crystalline foundation rock in the area  
of Grodno. Dokl. AN BSSR 4 no. 7: 307-310 J1 '60.  
(MIRA 13:8)

1. Institut geologicheskikh nauk AN BSSR.  
(Grodno District—Petrology)

MAKHNIACH, A.S.; KUROCHKA, V.P.; PAP, A.M.; MOLYAVKO, L.M.

Some features of the distribution of trace elements in rocks of the crystalline bedrock and the overlying weathering surface in the vicinity of Lososno and Glebovichi (Grodno Province). Dokl. AN BSSR 4 no.9:387-389 S '60, (MIRA 13:9)

1. Institut geologicheskikh nauk AN BSSR.  
(Grodno Province--Trace elements)

MAKHINACH, A.S.; KUROCHKA, V.P.; GOLUBTSOV, V.K.

Ruptures in the Strelchevo upheaval of the Pripet downwarping,  
their extent and age. Dokl. AN BSSR 5 no.8:352-356 Ag '61.  
(MIRA 14:8)

1. Institut geologicheskikh nauk AN BSSR.  
(Strelchevo region—Geology, Structural)

MAKHACH, A.S.; IT'KINA, V.P.; UR'ZEV, I.I.

The Middle Devonian deposits at Bragin and their lithologic and petrographic characteristics. Dokl. AN BSSR 5 no.9:393-396 S '61. (MIRA 14:10)

1. Institut geologicheskikh nauk AN BSSR.  
(White Russia--Geology, Stratigraphic)

MAKHNACH, A.S.; KUROCHKA, V.P.; UR'YEV, I.I.

Upper Devonian deposits of Bragin and their petrographic characteristics. Dokl. AN BSSR 5 no.10:458-461 0 '61. (MIRA 15:3)

1. Institut geologicheskikh nauk AN BSSR.  
(Bragin region--Petrology)

BOBROVNIK, D.P.; KUROCHKA, V.P.

Hydrobiotite in Lower Paleozoic sediments of the Dniester Valley.  
Vop. min. osad. obr. 6:34-43 '61. (MIRA 15:6)  
(Dniester Valley--Hydrobiotite)



NEVMERZHITSKAYA, Z.M.; KUROCHKA, V.P.

Formation of structures of the Pripet Depression in the Permian and the Triassic. Dokl. AN BSSR 6 no.3:181-184 Mr '62. (MIRA 15:3)

1. Institut geologicheskikh nauk AN BSSR. Predstavleno akademikom AN BSSR K.I.Lukashevym.  
(Pripet Valley--Geology, Structural)

ACCESSION NR.: AT4034465

S/3091/63/000/002/0056/0061

AUTHOR: Ivanchuk, V. I.; Kurochka, Ye. S.

TITLE: The problem of classification of the spectra of auroras

SOURCE: Kiyev. Universitet. Sbornik rabot po Mezhdunarodnomu geofizicheskomu godu, no. 2, 1963, 56-61

TOPIC TAGS: aurora, auroral classification, upper atmosphere, auroral brightness, auroral height, auroral spectrum

ABSTRACT: Investigations by Stormer and his associates have shown that the lower the height of auroral luminescence the greater will be its mean brightness. It follows that there should be a spectrum-brightness dependence (assuming the correctness of certain conclusions drawn by the author in this and other papers). The proposed form of the spectrum-brightness dependence has been given elsewhere (V. I. Ivanchuk, Sbornik rabot KGU po MGG, no. 1). This latest paper gives quantitative estimates of the mean effective brightness for a large number of spectra on the basis of observations at Tiksi Bay. Table 1 in the original gives brief extracts from the observation journal for each of the 36 studied spectra and results of determination of the spectral type s in accordance with the classification presented in the above-cited paper. The table also gives the commencement time for exposure

ACCESSION NR.: AT4034465

and the corresponding times of observation of the most characteristic auroral forms and their intensity in a 4-unit scale with an accuracy to a half-unit. The forms and colors are given in accordance with the classification recommended by the Institute of Terrestrial Magnetism, the Ionosphere and Radio Wave Propagation (Informatsionnyy sbornik MGG, no.3, 74, 1957). The table reveals that the assumption of existence of a spectral type-auroral brightness dependence is confirmed. The spectra of low type-B auroras possess great brightnesses 2-3-4. High type-A auroras for the most part decrease in brightness to the brightness of the night sky (assigned the value 0.5). Orig. art. has: 1 formula, 2 figures and 1 table.

ASSOCIATION: Kiyevskiy universitet (Kiev University)

SUBMITTED: 00

DATE ACQ: 07May64

ENCL: 00

SUB CODE: AA

NO REF SOV: 005

OTHER: 001

Card 2/2

ACCESSION NR: AT4032229

8/3089/63/000/005/0305/0311

AUTHOR: Ivanchuk, V. I.; Kurochka, Ye. S.

TITLE: Comments on the classification of auroral spectra

SOURCE: AN UkrSSR. Mezhdunarodnyy geofizicheskiy komitet. Geofizika i astronomiya; informatsionnyy byulleten', no. 5, 1963, 305-311

TOPIC TAGS: aurora, upper atmosphere, spectrometer, auroral classification

ABSTRACT: The authors discuss the spectral, photoelectric and spectrometric methods for studying emissions of the upper atmosphere. They note that photoelectric and spectrometric methods make it possible to narrow greatly the limits  $\Delta t$  and  $\Delta \lambda$ -- the space-time resolution, but that a considerable number of shortcomings are involved. However, the mass-nature of observations with such instruments can compensate for their inadequacies and permit detection of both general and local peculiarities of auroras. The authors have already published a spectral classification of auroras (Sb. rabot po MGG, KGU, No. 1, 58, 1961); much of this article is understandable only with reference to that paper. They have found that the character of the spectrum is determined primarily by the height of the luminescence or the depth of penetration into the atmosphere of the

Card 1/2

ACCESSION NR: AT4032229

agent responsible for auroras. Additional arguments are presented in this paper to validate this conclusion. If this height-spectrum relationship is correct, there also should be a spectrum-brightness dependence. A study of spectral observations at Tiksi Bay for the years 1958-1959 was made to determine whether such a relationship in fact exists; processing revealed the reality of the relationship. The spectra of low type-B auroras have great brightnesses 2-3-4. High type-A auroras for the most part decrease in brightness to the brightness of the night sky (assigned the value 0.5). In addition to the evidence of the 36 spectra used, other facts are presented to substantiate the spectrum-brightness relationship. The possibility of determining height of luminescence on the basis of spectrum is proposed to replace the more tedious traditional base measurement method. Orig. art. has: 5 figures, 2 formulas and 1 table.

ASSOCIATION: Kiyavskiy gosudarstvennyy universitet (Kiev State University)

SUBMITTED: 00

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: AA

NO REF SOV: 005

OTHER: 003

Card 2/2

KUROCHKIN, A.

True to their word. Rech. transp. 20 no.10:28 0 '61.  
(MIRA 14:9)

1. ~~U~~pektor Gorodetskogo sudoremontno-mekhanicheskogo  
zavoda.

(Ships--Maintenance and repair)

KUZNETSOV, S., kand.tekhn.nauk; KUROCHKIN, A., inzh.

Recent developments in the design of silos for grain and flour.  
Muk.-elev.prom. 30 no.1:10-11 Ja '64. (MIRA 17:3)

1. Gosudarstvennyy proyektnyy institut po proyektirovaniyu pred-  
priyatiy i sooruzheniy zernovoy i mukomol'noy promyshlennosti.

KUROCHKIN, A.; IL'ICHEV, A.

High quality at the specified time. Rech.transp. 21 no.11:22-24  
N '62. (MIRA 15:11)

1. Direktor Gorodetskogo sudoremontno-mekhanicheskogo zavoda  
(for Kurochkin). Nachal'nik planovo-proizvodstvennogo otdela  
Gorodetskogo sudoremontno-mekhanicheskogo zavoda (for Il'ichev).  
(Ships--Maintenance and repair)



NOSACHEV, D., gornyy inzhener; KUROCHKIN, A., gornyy inzhener.  
Remarks on N.A. Shuris' pamphlet "On Soviet cutting machine." D. Nosachev,  
A. Kurochkin. Ugol' 28 no. 6:47 Je '53. (MLRA 6:6)  
(Coal-mining machinery) (Shuris, N.A.)

KUROCHKIN, A., inzh.; RYSINA, Ye., inzh.; NOZHNIITSKIY, Y., inzh.

Increasing the durability of walls of the reinforced concrete  
frame of elevators. Muk.-elev.prom. 28 no.9:19-22 S '62.  
(MIRA 15:10)

1. Gosudarstvennyy proyektnyy institut po proyektirovaniyu  
predpriyatiy i sooruzheniy zernovoy i mukul'mol'noy promyshlennosti.  
(Grain elevators)

KUROCHKIN, A.; IL'ICHEV, A.

Potentialities of a plant. Rech. transp. 22 no.6:25 Je '63.  
(MIRA 16:9)

1. Direktor Gorodetskogo sudoremontno-mekhanicheskogo zavoda (for Kurochkin). 2. Nachal'nik planevo-proizvodstvennogo otdela Gorodetskogo sudoremontno-mekhanicheskogo zavoda (for Il'ichev).  
(Ships—Maintenance and repair)

MAKSIMOV, G.N.; KUROCHKIN, A.A.

Repairing cosine capacitors. Prom.energ. 16 no.9:20-21  
S '61. (MIRA 14:8)  
(Electric capacitors—Maintenance and repair)